

Examiner's Gp

AN 1983:202934 HCAPLUS
DN 98:202934
TI **Copper** alloys as **lead**-frame materials of
semiconductor devices
PA Sumitomo Electric Industries, Ltd., Japan
SO Jpn. Tokkyo Koho, 4 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 57056215	B4	19821129	JP 1977-4007	19770119
PRAI	JP 1977-4007		19770119		

AB **Cu** alloys contg. 0.02-0.3% **Ag** and 0.03-0.3% **Sn**
(with **Ag** + **Sn** 0.1-0.5%) are used as packaged
lead-frame materials for **semiconductor** devices. Thus,
cast ingot (140 .times. 140 .times. 2000 mm) of **Cu** alloy [**85759-48-4**]
contg. 0.11 **Sn** and 0.15% **Ag** was
hot-rolled to a 8 mm thick plate, cold-rolled, internally softened, and
cold-rolled to sheet 0.6 mm thick. The sheet was annealed 3 h at
420.degree., and temper-rolled to 0.4 mm thickness. This sheet had thermal
expansion coeff. 1.77 .times. 10⁻⁵/degree, tensile strength 36.5 kg/mm²,
and elec. cond. 89% of International Annealed **Cu** Std.